Feb. 27, 1940. A. L. HOCK 2,192,080

BATHING CAP

Filed Oct. 8, 1938

Fig. 1.

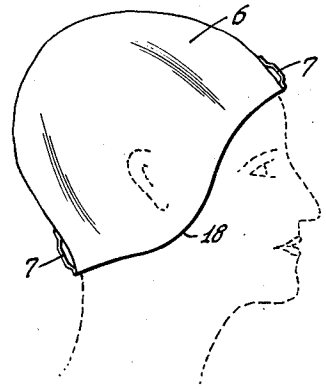


Fig. 2.

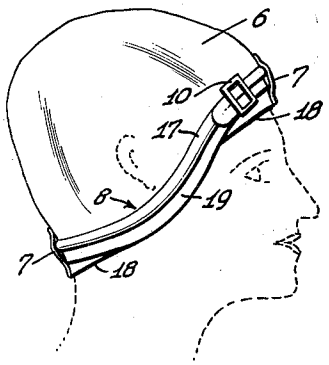


Fig. 3.

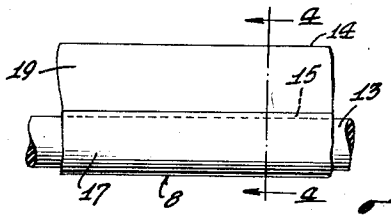


Fig. 4.

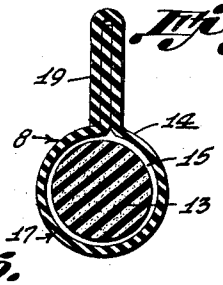


Fig. 5.

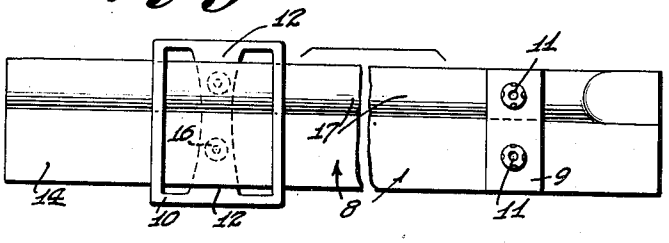
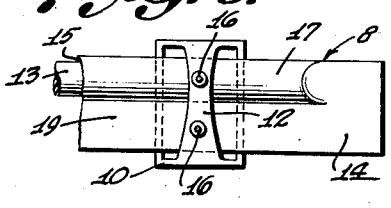


Fig. 6.



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2,192,080

BATHING CAP

Alvina L. Hock, Buffalo, N. Y.

Application October 8, 1938, Serial No. 233,970

3 Claims. (Cl. 2—68)

This invention relates to devices intended for the protection of the hair of bathers so as to keep the hair dry when bathing or swimming.

An object of the invention is to provide an improved protector which will effectively protect the hair of the wearer from being wet while bathing or swimming; which will be comfortable to wear, easily applied and removed; and which will be relatively simple and inexpensive.

Various other objects and advantages will be apparent from the following description of an embodiment of the invention, and the novel features will be particularly pointed out hereinafter in connection with the appended claims.

In the accompanying drawing:

Fig. 1 is a side elevation of the head of a person having a bathing cap disposed over the hair and ears, and which cap forms a part of this invention;

Fig. 2 is an elevation similar to Fig. 1 but with the protecting cap confined snugly against the head of the wearer by a band formed in accordance with this invention;

Fig. 3 is a plan of a portion of the band showing the sponge rubber roll incorporated therein;

Fig. 4 is a transverse sectional elevation through the band portion shown in Fig. 3, the section being taken approximately along the line 4—4 of Fig. 3;

Fig. 5 is a plan of the band when laid out straight; and

Fig. 6 is a plan of the left-hand end of the band as shown in Fig. 5, but showing the opposite face thereof.

Bathing caps heretofore in use, because of their tendency to stretch and the thinness of the sheet rubber employed, failed to lie closely against the hair and the head, and thus allowed the entrance of water beneath the cap at the marginal edge thereof. In the illustrated embodiment of the invention a bathing cap 6 may be employed which fits over the head of the wearer and covers the hair thereof as well as the ears, as shown in Fig. 1, such caps being commonly available and formed of live sheet rubber. To such a cap I provide loops or straps 7 along the marginal edge thereof. These straps 7 may be advantageously of rubber or the same material as the cap and secured or cemented at their ends thereto, one of these straps being preferably provided in the zone of the cap 6 which covers the forehead, and the other strap 7 may, if desired, be provided on the cap at the back of the neck.

In addition to such a cap, I provide a band 8 which is passed through the straps 7 and beneath the ears, as shown in Fig. 2, and the ends of the band are adjustably secured together to form a closed loop which encircles the head of the wearer, as shown in Fig. 2. The ends of the band 8 are brought together to a degree such that the band will be stretched when disposed over the head of the wearer in the manner shown in Fig. 2. The straps 7 prevent the band 8 from sliding down over the forehead and from sliding down the neck, and the projections formed in the cap 6 caused by the ears of the wearer are sufficient to keep the strap 8 down beneath the ears and from riding up. Thus, this device fully protects the ears against the entrance of water, and gives full protection to the hair of the wearer.

The band 8 is formed of elastic sheet material, such as live sheet rubber, which is folded lengthwise or looped to form a tunnel 15 in which is disposed loosely a roll or rod-like strip 13 of sponge rubber or similar longitudinally stretchable, elastic material. This roll or strip 13 of sponge rubber or similar material may be easily incorporated in the sheet rubber 14 by folding the sheet rubber over the roll 13, with both edges of the sheet rubber extending beyond one side of the roll or strip 13 to some extent, but with one edge extending further than the other edge, then folding the edge extending farthest from the roll over upon the other extending edge, as shown in Fig. 4. The three superposed layers thus obtained are cemented together so as to form a flange or fin 19 extending along one side of the roll zone 17 of the band. The strip 13 should be one continuous strip from end to end of the band.

Adjacent one end of the band 8 I secure individual fasteners 11 which are preferably secured to the band by a separate strip 9 which is cemented or otherwise secured to a face of the band 8. This strip 9 may be of fabric or rubber. These fasteners 11 may be of any suitable kind, such as snap fasteners commonly employed for clothing. On the other end of the band 8 I mount a slidable buckle 10 which may be slid along the band 8 to different adjusted positions, and which on a cross member 12 thereof carries a pair of complemental snap members 16 of the snap fastener type, but which are complemental to or adapted to snap into engagement with the fasteners 11 on the other end of the band 8. This buckle 10 may be a rectangular frame having a cross bar 12, and the fasteners 16 are carried by this cross bar 12.

As shown in Fig. 5 the fasteners 16 are on

the opposite face of the band 8 from the fasteners 11 so that the fasteners on opposite ends of the bands may engage as the ends oft he bands overlap and form a closed loop in the manner shown in Fig. 2. The band extends through the runner or buckle 10 by being threaded through the openings on opposite sides of the cross member 12 in a manner well known in garters and suspenders and is frictionally held thereon. The fasteners 11 and 16 are each preferably two in number, one pair being disposed along the portion of the band 17 having the tunnel 15, and the other pair along the flange 19 which extends from the tunnel portion. One end portion of the cross bar 12 may be made wider than the other end so as to provide, by the narrower portion, extra space in the runner openings through which the sponge edge zone 17 of the band may pass more easily.

The band is preferably disposed on the cap 6 with the rolled edge zone 17 thereof uppermost, that is, farthest from the marginal edge 18 of the cap 6. The flange 19 of the band which extends laterally from the rolled edge portion 17 extends downwardly from the rolled edge and is nearer the marginal edge 18 of the cap 6 as shown in Fig. 2. Thus the rolled edge zone 17 is spaced a little farther in from the marginal edge 18 over the cap 6 than is the flat flange zone 19. When the band is drawn taut and stretched so as to snugly fit the head, the flanged portion 19 not only is drawn flatly and tightly against the head, but also the rolled edge zone 17 is also drawn very snugly and firmly against the head, and by its engagement beneath the ears forces the marginal edge of the cap 6 against the head beneath the ears and also the remaining marginal portion of the cap 6 against the head, so that the entrance of water beneath the cap 6 is completely prevented.

Heretofore, in some cases, pneumatic tubes along the marginal edge of the cap 6 have been provided, but when such devices are immersed in water the buoyancy created thereby is so great that it tends to separate the band and cap from the head and is so easily distorted that it does not snugly fit the head and allows entry of water beneath the cap 6. The band 8 must be worn snug and stretched, yet it need not be drawn so tight that it is uncomfortable. Since the roll 13 is free to stretch and flatten separately from the enveloping sheet rubber 14, a more perfect adaptation of the band to the head is obtained. The band should be worn flat against the cap 6 with no patches along the marginal edge between the cap 6 and the band 8, nor beneath the cap, nor should there be any breaks in the strip or roll 13. In other words, the roll or strip 13 should run continuously from end to end of the band 8. The snaps on the end of the band, as explained, are preferably on an extra piece of material cemented on the band and may tend to flatten the band slightly where applied.

The enveloping material 14 at the ends of the band should preferably be cemented together, so as to fully close the tunnel 15 against the entrance of water, as shown particularly in Fig. 5. One device made in accordance with this invention, which has proved very satisfactory, employed a strip or roll 13 of sponge rubber which had a transverse circumference of from 1¼ inches to 1½ inches. The width of the band in that device was from about 1 to 1¼ inches, but it will be understood that these sizes may vary some.

The sponge rubber or other material of which the strap or roll 13 is made must not be a pneumatic tube, nor too solid a consistency of the sponge. If it is too solid it will not stretch well and will not conform properly to the irregularities in the head as it is drawn taut about the marginal edge of the cap. If the sponginess of the strip 13 is too pronounced, it approaches too closely to a pneumatic tube and it does not lie snugly against the head when drawn taut, and the water then tends to float it away from the marginal edge of the cap and allow the entrance of water beneath the cap. Because of looseness of the strip 13 in the tunnel 15, the strip 13 can stretch freely and flatten a little when pulled around the head so as to more easily conform to the head.

It will be understood that if desired the ends of the band may be cemented or otherwise secured together to form a perfectly closed loop which is stretched in forcing it over the head with the application of the cap 6 to the head, but preferably the band is free of the marginal edge of the cap 6 except at a few zones of the cap, one of which is preferably at the forehead, so that the band will always lie along the marginal edge of the cap and not slide down and release any portion of the cap. If desired, the band 8 may be cemented to the cap 6 at desired points in place of the loops 7. In place of the sponge rubber, the roll 13 may be made of other stretchable, elastic material such as knit loops, but I have found that sponge rubber is very inexpensive, very effective, and the most satisfactory for this purpose.

The sheet rubber 14 may, of course, be replaced by other, similar, stretchable material, but I prefer the sheet rubber because it provides a water-tight encasement for the sponge rubber or roll 13, and is itself independently stretchable endwise of the band. Thus the sheet rubber portion of the band and the roll 13 may both stretch independently of one another in an endwise direction. It will be understood that various other means may be employed for fastening the ends of the bands together in an adjustable manner.

It will be understood that various changes in materials, details and arrangements of parts, which have been herein described and illustrated in order to explain the nature of the invention, may be made by those skilled in the art within the principle and scope of the invention, as expressed in the appended claims.

I claim:

1. An improved hair protector for bathers comprising an imperforate cap formed to fit the head of a bather and substantially cover the hair on the head, a band confined upon the outside of said cap adjacent the marginal edge thereof at at least one point of said edge, and free of said marginal edge for the major portion of said edge, so as to stretch and contract independently of said marginal edge, said band being formed for the entire head encircling portion thereof of a longitudinally elastic, rod-like element having an independently and longitudinally elastic, approximately flat flange of substantial width along and projecting from one side thereof, said band forming a closed loop completely encircling the head of the wearer under stretch, at approximately the hair line of said head and along approximately said marginal edge of the cap, to confine said marginal edge snugly to the head of the wearer.

2. An improved hair protector for bathers comprising an imperforate cap formed to fit

the head of a bather and substantially cover the hair on the head, a band confined upon the outside of said cap adjacent the marginal edge thereof at at least one point of said edge, and free of said marginal edge for the major portion of said edge, so as to stretch and contract independently of said marginal edge, said band being formed for the entire head encircling portion thereof of a longitudinally elastic, rod-like element of sponge rubber having an independently and longitudinally elastic, approximately flat flange of substantial width along and projecting from one side thereof, said band forming a closed loop completely encircling the head of the wearer under stretch, at approximately the hairline of said head and along approximately said marginal edge of the cap, to confine said marginal edge snugly to the head of the wearer.

3. An improved hair protector for bathers comprising an imperforate cap formed to cover substantially all of the hair of the head of a bather, a band confined to and upon the outside of said cap adjacent the marginal edge thereof for a limited extent, and free of said marginal edge for the major portion of said edge so as to stretch and contract independently of said marginal edge, said band being formed of a rod-like continuous strip of sponge rubber of a length at least sufficient to encircle the head of the bather at the hair line, and a flat strip of sheet rubber having a tunnel along the edge thereof farthest from said marginal edge of the cap, and along and in which tunnel said sponge rubber strip extends loosely, so as to be free to contract and stretch independently of said sheet rubber, said band forming a closed loop completely encircling the head of the wearer, under stretch, at approximately the hair line of said head to confine said marginal edge on said cap snugly to the head of the wearer.

ALVINA L. HOCK.